



- NOTES**
1. INSTRUMENT LINE VALVES AND CONTAINMENT RETRACTION PIPING SHALL BE PROVIDED WITH A RETRACTION PIPING SYSTEM AS SHOWN WITHIN THE INSTRUMENT LINE VALVES AND CONTAINMENT RETRACTION PIPING SYSTEM.
  2. ALL INSTRUMENT LINE VALVES ARE PROVIDED WITH A RETRACTION PIPING SYSTEM AS SHOWN WITHIN THE INSTRUMENT LINE VALVES AND CONTAINMENT RETRACTION PIPING SYSTEM.
  3. FOR INSTRUMENT LINE VALVES AND AUTO VALVE ACTUATOR, SEE DOC 4.
  4. THE CONDENSATE VALVE WITH LEADOFF TO THE SUPPRESSION POOL SHALL BE PROVIDED WITH A RETRACTION PIPING SYSTEM AS SHOWN WITHIN THE INSTRUMENT LINE VALVES AND CONTAINMENT RETRACTION PIPING SYSTEM.
  5. FOR VALVE STEM LEADOFF DETAIL, SEE REF DOC 4.
  6. FOR VALVE AND PIPING ARRANGEMENT REQUIREMENTS, SEE DOC 4.
  7. INSTRUMENT LINE VALVES AND ALL TRIP SIGNALS EXCEPT INSTRUMENT LINE VALVES SHALL BE PROVIDED WITH A RETRACTION PIPING SYSTEM AS SHOWN WITHIN THE INSTRUMENT LINE VALVES AND CONTAINMENT RETRACTION PIPING SYSTEM.
  8. FOR CLOW TAP INSTALLATION, SEE REF DOC 4.
  9. ALL VENT, DRAIN AND TEST CONNECTIONS ARE 20A UNLESS OTHERWISE NOTED.
  10. CONTAINMENT ISOLATION VALVES SHALL BE LOCATED AS CLOSE TO THE CONTAINMENT AS PRACTICAL.
  11. ALL INSTRUMENTATION TO BE PROVIDED FROM DC BATTERIES. ALL INSTRUMENTATION TO BE PROVIDED FROM DC BATTERIES. ALL INSTRUMENTATION TO BE PROVIDED FROM DC BATTERIES.
  12. DRAINING CONNECTIONS AND TEMPORARY STRAINER SCREENS SHALL BE PROVIDED ON THE SUCCTION SIDE OF ALL PUMPS IN ACCORDANCE WITH DOCUMENT 4-1018.
  13. CLASSIFICATION 4C IS THE MINIMUM REQUIREMENT. A HIGHER CLASS IS ACCEPTABLE.
  14. VALVES F003 AND F004 SHALL BE LOCATED BELOW THE NORMAL WATER LEVEL OF THE SUPPRESSION POOL AND THE CONDENSATE STORAGE TANK AND AS CLOSE AS PRACTICAL TO THE OUTLET OF FLOW ELEMENT.
  15. THE METHOD OF MOUNTING LOCAL INSTRUMENTS IS TO BE DETERMINED BY THE PIPING DESIGNER.
  16. FOR ADDITIONAL COOLING ROOM LIGHTS, SYSTEMS ALARMS AND REMOTE MANUAL INTERLOCK, SEE REF DOC 4.
  17. PROVISIONS FOR CONTAINMENT ISOLATION SHALL BE IN ACCORDANCE WITH THE CURRENT LICENSING REQUIREMENTS.
  18. PIPE SIZES SHOWN ON THIS DRAWING ARE APPROXIMATE EXCEPT AT CONNECTIONS WITH MAIN FLOW PIPING. DO NOT SCALE AND INTERFACES WITH RSI SYSTEMS. THE PIPING DESIGNER SHALL PROVIDE THE EXACT PIPE SIZES IN ACCORDANCE WITH THE SYSTEM DESIGN SPECIFICATION AND PROCESS FLOW DIAGRAM.
  19. VENT AT HIGH POINT, 0.6 m TO FIRST VALVE.
  20. COOLING AND SEALING WATER DESIGN IS ASY FOR THE CONDENSATE AND VACUUM PUMPS TO BE PROVIDED BY THE EQUIPMENT VENDOR.
  21. PIPING DESIGN SPECIFICATION ARE AS FOLLOWS:  
 A. MAXIMUM OPERATING PRESSURE - SEE SPECIFIC BOUNDARY SYMBOL  
 B. MAXIMUM OPERATING TEMPERATURE - SEE SPECIFIC BOUNDARY SYMBOL  
 C. MATE. - CARBON STEEL  
 D. PIPING SCHEDULE - INTERFACE  
 E. DESIGN CLASS - SEE SPECIFIC BOUNDARY SYMBOL  
 F. ON CLASS - SEE SPECIFIC BOUNDARY SYMBOL  
 G. DESIGN CLASS - AS  
 H. FLUID - W FOR WATER, S FOR STEAM
  22. SPOOL CONNECTION FROM P01 USE DOC 13 FOR RCC PRE-OPERATIONAL TESTING.
  23. AIR SUPPLY SHOWN IN REFERENCE DOCUMENT 10.
  24. TRIP VALVES CAN BE PROVIDED AT SUPPLIER'S OPTION ON HIGH RADIATION AND LOW PRESSURE LEVEL.
- THIS DOCUMENT PROVIDES A FUNCTIONAL DEFINITION OF THE REQUIRED SYSTEM LEVEL PROCESS MONITORING AND CONTROL INSTRUMENTATION. IT DOES NOT ADDRESS THE DESIGN OF THE INSTRUMENTATION. THE INSTRUMENTATION SHALL BE PROVIDED BY THE EQUIPMENT VENDOR. THE INSTRUMENTATION SHALL BE PROVIDED BY THE EQUIPMENT VENDOR.

REFERENCE DOCUMENTS UNDER THE FOLLOWING IDENTITIES SHALL BE USED IN CONJUNCTION WITH THIS DRAWING:

IDENTITY	MPL NO.
1. RCC SYSTEM ID	E51-1030
2. NUCLEAR BOILER SYSTEM P&ID	E21-1010
3. RHR SYSTEM P&ID	E7-1010
4. LEAK DETECTION & ISOLATION SYS ID	E31-1010
5. CLW SYSTEM P&ID	O31-1010
6. MAKEUP WATER CONDENSATE SYS P&ID	F3-1010
7. MULTIPLEXING SYSTEM ID	H23-1010
8. HIGH PRESSURE CORE FLOODER SYS P&ID	E22-1010
9. ATMOSPHERIC CONTROL SYS P&ID	T31-1010
10. INSTRUMENT AIR SYSTEM P&ID	P52-1010
11. VALVE GLAND LEAKAGE TREATMENT RADWASTE SYS	K17-1010
12. SUPPRESSION POOL TEMP MONITORING	I53-1010
13. LEAK DETECTION AND ISOLATION SYS ID	E31-1030
14. MAIN CONDENSER	N61-1010
15. HEATING STEAM AND CONDENSATE WATER RETURN SYS	P61-1010
16. HIGH CONDUCTIVITY WASTE RADWASTE SYSTEM	K17-1010
17. LOW CONDUCTIVITY WASTE RADWASTE SYSTEM	K17-1010
18. PIPING & INSTRUMENTATION DIAGRAM SYMBOLS	A10-3030

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FIGS. 5.4-8  
6.3-8  
MPL NO. E51-1010

GENERAL INFORMATION		CLASSIFICATION	
DESIGNER	DATE	CLASSIFICATION	DATE
REVISIONS			
1. REVISED	11/20/90		
2. REVISED	11/20/90		
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PDR RIDS

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